Linux Complier 학교 서버(Linux)를 이용해 프로그램 작성

**Internet Technology**

**Design & Analysis Computer Algorithm (problem solving)**

* Binary Search
* Divide and Conquer
  + Master theorem
  + Mergesort
  + Selection algorithm
  + Fast matrix multiplication
* Dynamic Programming (동적 계획법)
  + Break it into sub-problems to compute
  + Knapsack
  + Memoize
* Hashing, Randomized Algorithm
  + Evolutionary Algorithm
* String Matching
  + Karp-Rabin fingerprints
* Graph Algorithm
  + BFS, DFS
  + Topological sort
  + Dijkstra’s graph
  + Karger’s Algorithm ??
* Approximation algorithm
  + Makespan scheduling
  + Vertex cover
  + Max matching

**Data 101**

* R code
* Prediction
  + Looking at graphs

**Principle Information & Data Management**

**CS111 (Java)**

GameState.java (Uno)

* 4명의 플레이어 생성
* 무슨 카드를 play할지 알고리듬
* List를 이용하여 카드 수를 세움
* Text-Base Simulator

**Discrete Structures(I,II) 이산수학**

**Cs112(Java- Eclipse) – concept만**

* BST/AVL tree
* Hash table
* Graph
  + Dijkstra’s Shortest path
  + DFS/BFS (깊이/너비 우선 탐색) LL
* Sorting –
  + Insertion/
  + Quick – Divide&Conquer
    - Pivot and go through the list and get the value
  + Merge - Divide&Conquer
  + Heap sort(make tree to find the asc/dec order) AL
* Friendship Graph/Little Search Engine(Dictionary)
* **Computer Architecture ( C Lang.)**
  + NO Casting/ library 사용제한
* Tokenizer – string 변수를 읽고 무슨 데이터 종류 알아내기 (Octal/decimal/float/Hexadecimal)
* Computer Arithmetic(계산기) – 데이터 종류 타입을 넣고 계산
  + E.g. ./calc + d1111 b11010 o 답: 2161
* Assmbly Language

**System Programming**

Using .csv file to analyze the data and to sort the data.